

A NEW ARACHISOTHRIPS FROM ARGENTINA

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The species described below was taken by Dr. Petr Wygodzinsky at Tucumán Argentina, and is particularly interesting because the known distribution of the genus is thereby extended from Mexico and Jamaica to the far southern portion of South America.¹

Arachisothrips seticornis, sp. nov. (Pls. V and VI).

Female (macropterous).—Length 0.82 mm. Color brownish yellow; pterothorax darkened laterally, abdomen paler apically, legs concolorous with body; fore wings with a gray-brown band across middle of inflated part, this band broadened along posterior margin of wing and connected along this margin with a second cross-band which occupies basal half of narrowed apical part of wing; antennal segment I yellow and paler than head, II yellowish brown and darker than head, III and IV yellow and shaded with gray in about basal half except for the yellow, narrow pedicel of III; V-VIII gray brown, the first of these paler than the others, especially in basal half.

Head (Fig. 2) typical in form, with strongly constricted, neck-like base, protruding eyes, distinct postocular notch, and broad frontal costa; cheeks greatly swollen, somewhat diverging posteriorly, then so abruptly constricted that the posterior margin of the resulting bulge is transverse; dorsal surface polygonally reticulate. Eyes small, rounded, 53μ long dorsally, 40μ wide, 91 apart. Ocelli small, borne on a slight prominence, the median one facing forward above a longitudinal groove, the posterior pair directed somewhat posteriorly and laterally, 13μ in diameter and 13μ apart. Mouth-cone short (66μ), broadly rounded. Antennae (Fig. 3) eight-segmented, typical in structure, terminal segment extremely long and slender, about twenty-two times as long as greatest width; antennae almost devoid of setae and with all sense-cones simple and arising from outer surface of segments, III-V each with one near apex, VI with one at apical third, VII with one at basal third, this the largest; segment II reticulate with asperate lines, III-V each with several distinct, raised cross-lines.

Prothorax (Fig. 2) transverse, sides diverging posteriorly (rather than merely rounded), dorsum finely cross-striate throughout, except in the two sublateral foveae and for a few polygonal reticles laterally (rather than

¹The cost of the cuts for the two accompanying plates was borne by Cornell University, through its committee on Faculty Research Grants.

striate merely anteriorly and posteriorly); posterior third abruptly elevated and with its anterior margin vertical (rather than undifferentiated from rest of notum); all setae minute. Fore wings (Figs. 1, 4, 5) typical, greatly inflated in basal two-thirds to form a sac, but not appreciably constricted at middle of this inflation, entire surface of wing except extreme tip and an area along costal margin near base of wing polygonally (usually hexagonally) reticulate; ambient vein complete, broad, and strong, its costal portion set with stout, nearly black, backwardly-curved, asperate (not pinnate) setae (Fig. 6) which are supported by pale stalks, the setae disposed in two series in the saccate part of wing, one series arising from anterior margin of vein and directed outward, the other arising from inner surface and directed inward, both series inclined upward (morphologically) and together presenting the appearance of ribs arising from a breastbone, several of them projecting beyond base of wing as seen from above; median vein broad and distinct, with one stalked seta where it ends on distal margin of inflation; one long (160μ), slender, pale seta extending into wing-sac; hind wings typical. Legs typical, tibiae claviform (Figs. 7-9).

Abdomen normal, lightly reticulate at sides, lightly cross-striate elsewhere in most of dorsal surface.

Measurements of female (holotype): Length 0.82; head, total length 0.110, median length 0.106, width across eyes 0.171, just behind eyes 0.155, greatest width across cheeks 0.167, least width near base 0.107; prothorax, median length of pronotum 0.070, greatest width of pronotum 0.190; mesothorax, greatest width across anterior angles 0.203; metathorax, greatest width posteriorly 0.231; fore wings, length 0.853, greatest width 0.276; abdomen, greatest width 0.337.

Antennal segments:	I	II	III	IV	V	VI	VII	VIII
Length (μ):	30	47	110	63	62	43	32	132
Width (μ):	34	35	18	17	19	14	9	6

Total length of antenna 0.519 mm.

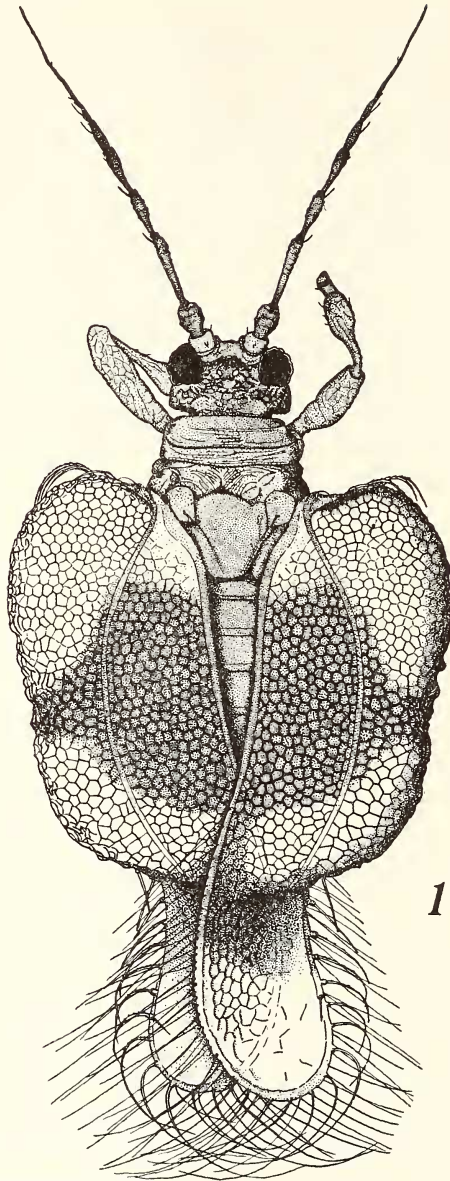
ARGENTINA: Tucumán, February 14, 1953, Dr. Petr Wygodzinsky, 1 ♀ (holotype), from "Parque Aconquija, in a dark and rather moist place in the forest, near a small creek, among fallen leaves."

It is impossible to compare this species satisfactorily with the two previously-named ones because the descriptions of the latter are too brief and do not include the measurements which present-day workers on the group consider essential. The eight-segmented antennae should presumably distinguish it from the Jamaican *millsi*, whose antennae

are said to be seven-segmented, though the reference in the original description of that species is to a figure which shows an eight-segmented antenna. From the Mexican *boneti*, described in somewhat less than seven full lines of text, which is said to have eight-segmented antennae but where again the reference is apparently to the wrong figure, the present species would appear to differ markedly in (1) the subangulate, rather than rounded, cheeks; (2) the shallower constriction near the middle of the saccate part of the fore wings; and (3) the form of the sides of the pronotum. Perhaps, too, the eighth antennal segment is slenderer. The conspicuously elevated posterior third of the pronotum and the almost complete cross-striation of its surface, referred to in the description above, are presumably characters possessed in common by all three species, even though not shown in the figure of *boneti*.

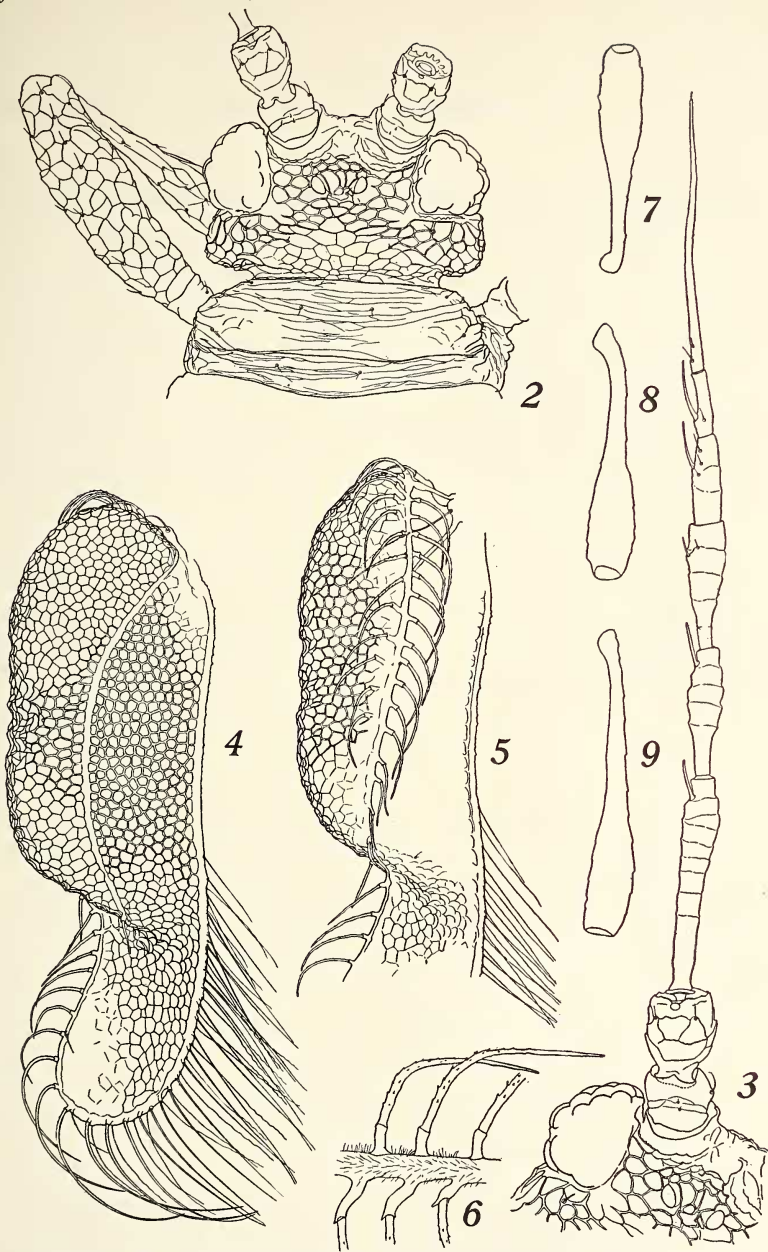
Seen for the first time, the members of this genus present a most un-thysanopterous appearance, because their greatly inflated fore wings, marked with a dark cross-band and reticulated, produce a striking resemblance to the homopterous Tingidae, such as *Corythuca*—in fact, one wonders whether their apparent scarcity might not be partly due to the failure of collectors to penetrate their disguise. With their wings removed, however, or if short-winged, they would be looked upon by any student of the thrips as a thoroughly conventional type of Heliothripinae, and, indeed, the characters exhibited by the wings are merely of degree, rather than of kind: Reticulated fore wings and stalked setae, for example, occur in *Parthenothrips* and saccate fore wings in *Retithrips*. The legs and antennae, as well as other body parts and the sculpture, are closely duplicated in other members of the same group.

This close relationship certainly must be reflected in their food habits, and the three known species, rather than being "inhabitants of ground cover" are much more likely feeders upon green leaves like their relatives. The fact that only five specimens are known to date bears out a belief that we know little about where to look for them.



Arachisotbrrips seticornis, sp. nov.; ♀, holotype, x 46.

[J.D.H., camera lucida]



Arachisothrips seticornis, sp. nov.; ♀, holotype. — 2, head and prothorax, x 157. — 3, left antenna and front of head, x 196. — 4, left fore wing, x 73. — 5, anterior portion of right fore wing, ventral aspect, x 73 (sculpture of the morphologically ventral surface shown only at bend of wing). — 6, basal portion of costal vein of left fore wing, x 196. — 7, left fore tibia, ventral aspect, x 118. — 8, left middle tibia, ventral aspect, x 118. — 9, left hind tibia, ventral aspect, x 118.

[J.D.H., camera lucida]